ode 4910-13

#### DEPARTMENT OF TRANSPORTATION

### **Federal Aviation Administration**

14 CFR Part 25

[Docket No. FAA-2022-0532; Notice No. 25-22-03-SC]

Special Conditions: Airbus A320-200 Series Model A320-251N, -252N, -253N, -271N, -272N, -273N Airplanes and A321-200 Series Model A321-251NX, -252NX, -253NX, -271NX, -272NX Airplanes; Flight Attendant Seat Mounted on Movable Interior Structure

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Airbus A320-200 Series Model -251N, -252N, -253N, -271N, -272N, -273N (known as A320neo) airplanes and A321-200 Series Model -251NX, -252NX, -253NX, -271NX, -272NX (known as A321neo) airplanes. The airplanes will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. This design feature is flight attendant seats mounted on movable lavatory doors. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These proposed special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**DATES:** Send comments on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Send comments identified by Docket No. FAA-2022-0532 using any of the following methods:

- Federal eRegulations Portal: Go to https://www.regulations.gov/ and follow the online instructions for sending your comments electronically.
- Mail: Send comments to Docket Operations, M-30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue, SE, Room W12-140, West Building Ground Floor, Washington, DC, 20590-0001.
- Hand Delivery or Courier: Take comments to Docket Operations in Room
   W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE,
   Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except
   Federal holidays.
- Fax: Fax comments to Docket Operations at 202-493-2251.

Privacy: Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in title 14, Code of Federal Regulations (14 CFR), § 11.35, the FAA will post all comments received without change to https://www.regulations.gov/, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about these special conditions.

Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to these special conditions contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to these special conditions, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA

will treat such marked submissions as confidential under the FOIA, and the indicated comments will not be placed in the public docket of these special conditions. Send submissions containing CBI to the Information Contact below. Comments the FAA receives, which are not specifically designated as CBI, will be placed in the public docket for these special conditions.

*Docket:* Background documents or comments received may be read at https://www.regulations.gov/ at any time. Follow the online instructions for accessing the docket or go to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Shannon Lennon, Human Machine Interface, AIR-626, Technical Innovation Policy Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, Washington 98198; telephone and fax 206-231-3209; e-mail shannon.lennon@faa.gov.

# **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

The FAA invites interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

The FAA will consider all comments received by the closing date for comments.

The FAA may change these special conditions based on the comments received.

# Background

On October 27, 2020, Airbus SAS applied for a change to Type Certificate

No. A28NM for flight attendant seats mounted on movable lavatory doors in A320-200

Series Model A320-251N, -252N, -253N, -271N, -272N, and -273N (known as A320neo) airplanes and A321-200 Series Model A321-251NX, -252NX, -253NX, -271NX, and -272NX (known as A321neo) airplanes. These airplanes are twin-engine, transport category airplanes. The A320neo has a maximum passenger seating capacity of 179 and the A321neo has a maximum passenger seating capacity of 244.

The applicable airworthiness requirements do not contain adequate or appropriate safety standards for this new lavatory door-mounted flight attendant seat. Section 25.785 of title 14, Code of Federal Regulations (14 CFR) specifies certain requirements for flight attendant seats but did not consider flight attendant seats mounted on movable structure such as lavatory doors and, therefore, does not specifically address additional concerns associated with ensuring the flight attendant seats are safe to occupy when necessary. Therefore, special conditions are necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

# **Type Certification Basis**

Under the provisions of title 14, Code of Federal Regulations (14 CFR), § 21.101, Airbus must show that the A320neo and A321neo airplanes, as changed, continue to meet the applicable provisions of the regulations listed in Type Certificate No. A28NM or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Airbus A320neo and A321neo airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model

already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Airbus A320neo and A321neo airplanes must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.101.

# **Novel or Unusual Design Features**

The Airbus A320neo and A321neo airplanes will incorporate the following novel or unusual design features:

Flight attendant seats mounted on movable lavatory doors.

## Discussion

Airbus will install, in A320neo and A321neo airplanes, flight attendant seats on lavatory doors. The lavatory door-mounted flight attendant seat is intended to be occupied during all phases of flight, including takeoff and landing.

Flight attendant seats are typically floor-mounted or wall-mounted on a non-movable structure (e.g., mounted on monument walls) which is attached to the airplane structure. The installation of a flight attendant seat on movable structure, such as a lavatory door, introduces certain issues that must be addressed to ensure safety of the attendant seat occupant. Such considerations include ensuring that the lavatory door is closed (fixed) when the flight attendant seat is to be occupied and ensuring that the lavatory door lock mechanism is reliable after frequent use of the lavatory door.

Additionally, the lavatory door, door locking mechanism, and door housing will need to

withstand certain loading conditions as that structure is part of the load path between seat structure and airplane structure.

Other issues include ensuring that the flight attendant seat is available to use when necessary, which requires a way to ensure the lavatory is not occupied when the flight attendant seat must be occupied. Also, additional maintenance requirements will need to be considered to establish the reliability of the lavatory door locking mechanism, as it is a feature that will be frequently used.

The proposed special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

# **Applicability**

As discussed above, these special conditions are applicable to the A320 Series Model -251N, -252N, -253N, -271N, -272N, -273N (known as A320neo) and A321 Series Model -251NX, -252NX, -253NX, -271NX, -272NX (known as A321neo) airplanes. Should Airbus apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, these special conditions would apply to that model as well.

#### Conclusion

This action affects only a certain novel or unusual design feature on A320 Series Model -251N, -252N, -253N, -271N, -272N, -273N (known as A320neo) and A321 Series Model -251NX, -252NX, -253NX, -271NX, -272NX (known as A321neo) airplanes. It is not a rule of general applicability.

## List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

#### **Authority Citation**

The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(f), 106(g), 40113, 44701, 44702, 44704.

### **The Proposed Special Conditions**

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for A320 Series Model -251N, -252N, -253N, -271N, -272N, -273N (known as A320neo) and A321 Series Model -251NX, -252NX, -253NX, -271NX, -272NX (known as A321neo).

- (a) The lavatory door-mounted flight attendant seat-system primary load path, including the flight attendant seat, seat attachment means, the lavatory door, and lavatory door attachment to the lavatory housing—including the locking mechanism—must be shown to be capable of withstanding the emergency landing dynamic loads in accordance with § 25.562. The lavatory housing and the lavatory attachment to the airplane structure must comply with the requirements of § 25.561.
- (b) Means must be provided to ensure that the flight attendant seat can only be used if the lavatory door is securely locked in the closed position.
- (1) The procedures for establishing that the lavatory door is closed and locked prior to use of the flight attendant seat must become part of the cabin crew training.
- (2) The effects of structural deformation of the lavatory door and lavatory door housing must be addressed to prevent unlocking or failure of the locking mechanism.
- (c) Means must be provided to ensure that the lavatory is not occupied so that the flight attendant seat is available when necessary.
- (d) Means must be provided to ensure that no one is inadvertently trapped inside the lavatory when the lavatory door is locked to facilitate use of the flight attendant seat.
- (e) The lavatory door locking mechanism must be shown to withstand frequent use. Potential deterioration of moving parts must be addressed to show that the locking mechanism is reliable within its established life cycle. Accordingly, instructions for continued airworthiness must also be defined for the locking mechanism.

Issued in Kansas City, Missouri, on October 11, 2022.

Patrick R. Mullen,
Manager, Technical Innovation Policy Branch,
Policy and Innovation Division,
Aircraft Certification Service.

[FR Doc. 2022-22494 Filed: 10/14/2022 8:45 am; Publication Date: 10/17/2022]